



# February 2018 Water Supply Briefing

National Weather Service/Northwest River Forecast Center



Telephone Conference : 1-914-614-3221

Pass Code : 619-465-763

Audio PIN provided when login into the webinar

Please Note:

In order to ask questions using phone, you will need to enter the provided **AUDIO PIN** using your phone key pad (PIN #). If you need to enter the PIN after you are connected, try (# PIN #).

You will be 'muted' until the presenter unmutes you. Use the '**raise hand**' function to let presenter know you wish to be unmuted

Steve King, NWRFC  
W-ptr.Webmaster@noaa.gov  
(503)326-7291



# Water Supply Forecast Briefing Outline



## Observed Conditions WY2018:

- Precipitation
- Temperature
- Snowpack
- Runoff

## Future Conditions:

- Weather Forecast (QPF)
- Climate Outlook (NOAA/NWS/CPC)

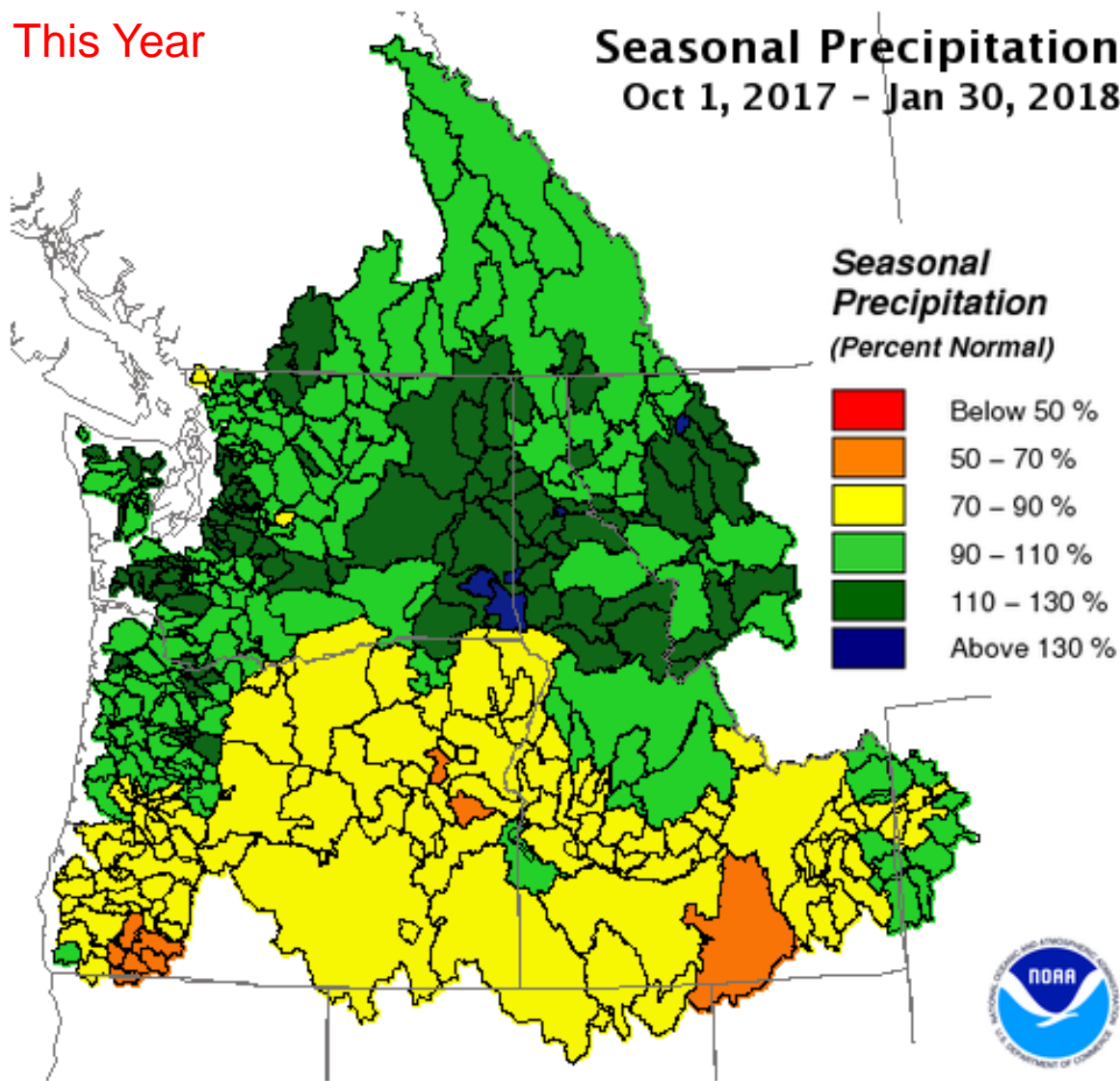
## Water Supply Forecast Summary (ESP)

# Observed Seasonal Precipitation (WY18)

(Percent of 30yr Normal)

**This Year**

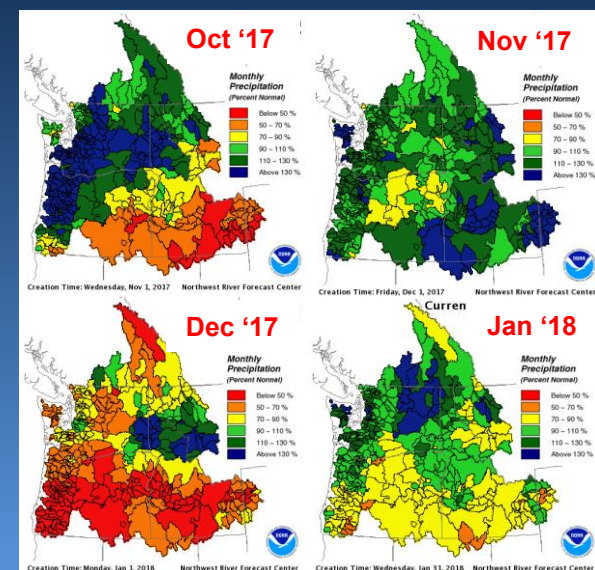
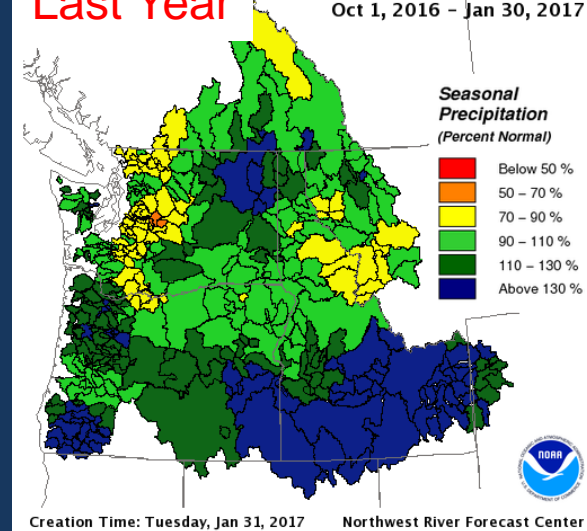
**Seasonal Precipitation**  
Oct 1, 2017 - Jan 30, 2018



Creation Time: Wednesday, Jan 31, 2018 Northwest River Forecast Center

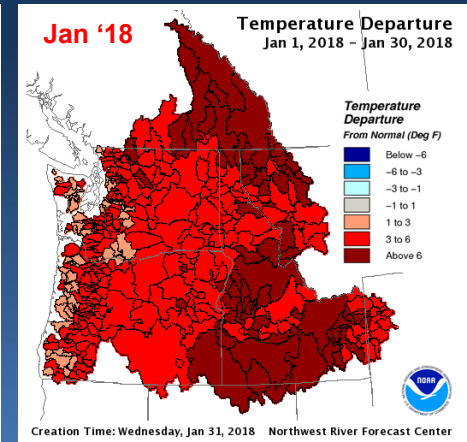
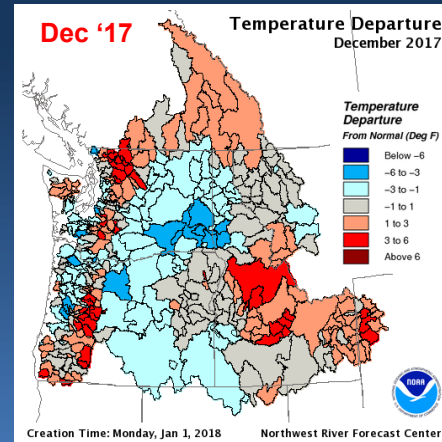
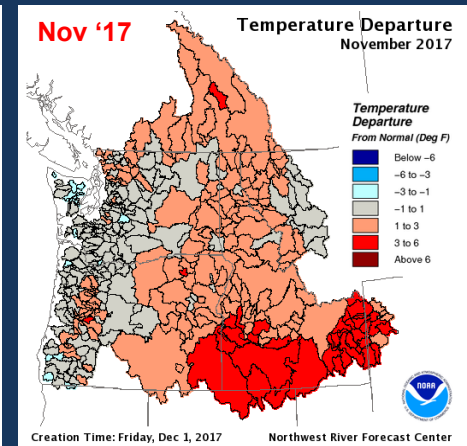
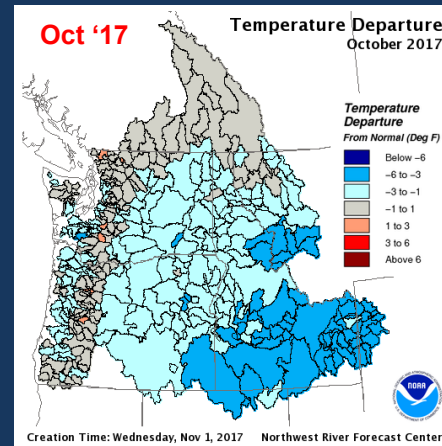
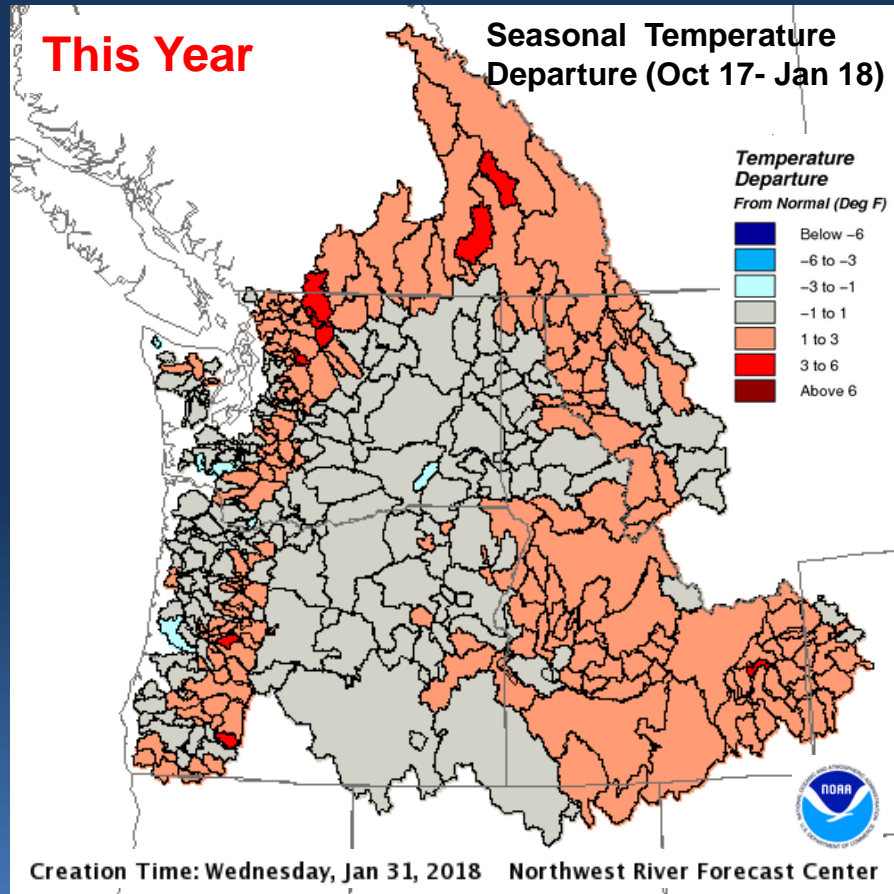
**Last Year**

**Seasonal Precipitation**  
Oct 1, 2016 - Jan 30, 2017



# Observed Seasonal Temperature

## Departure from 30yr Normal (Deg F)

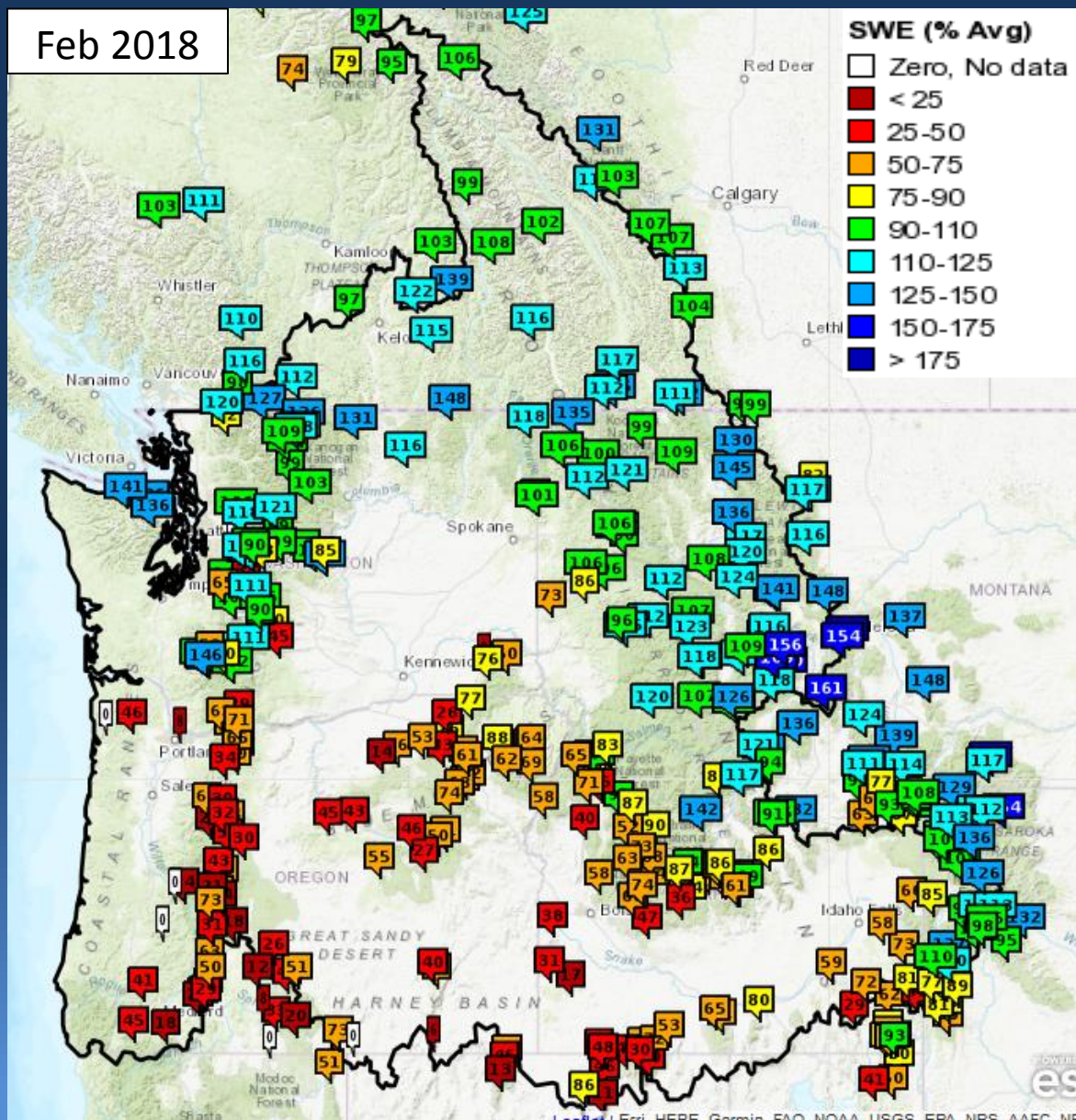




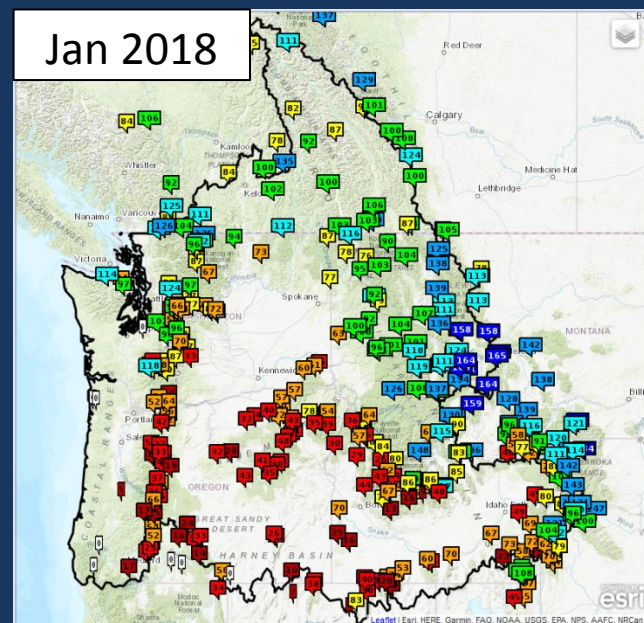
# Snowpack Summary

## Snow Water Equivalent (% 30yr Normal)

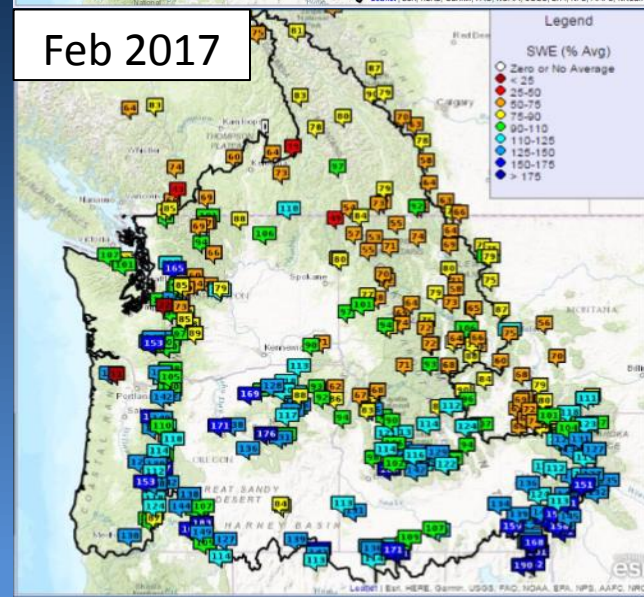
Feb 2018



Jan 2018



Feb 2017



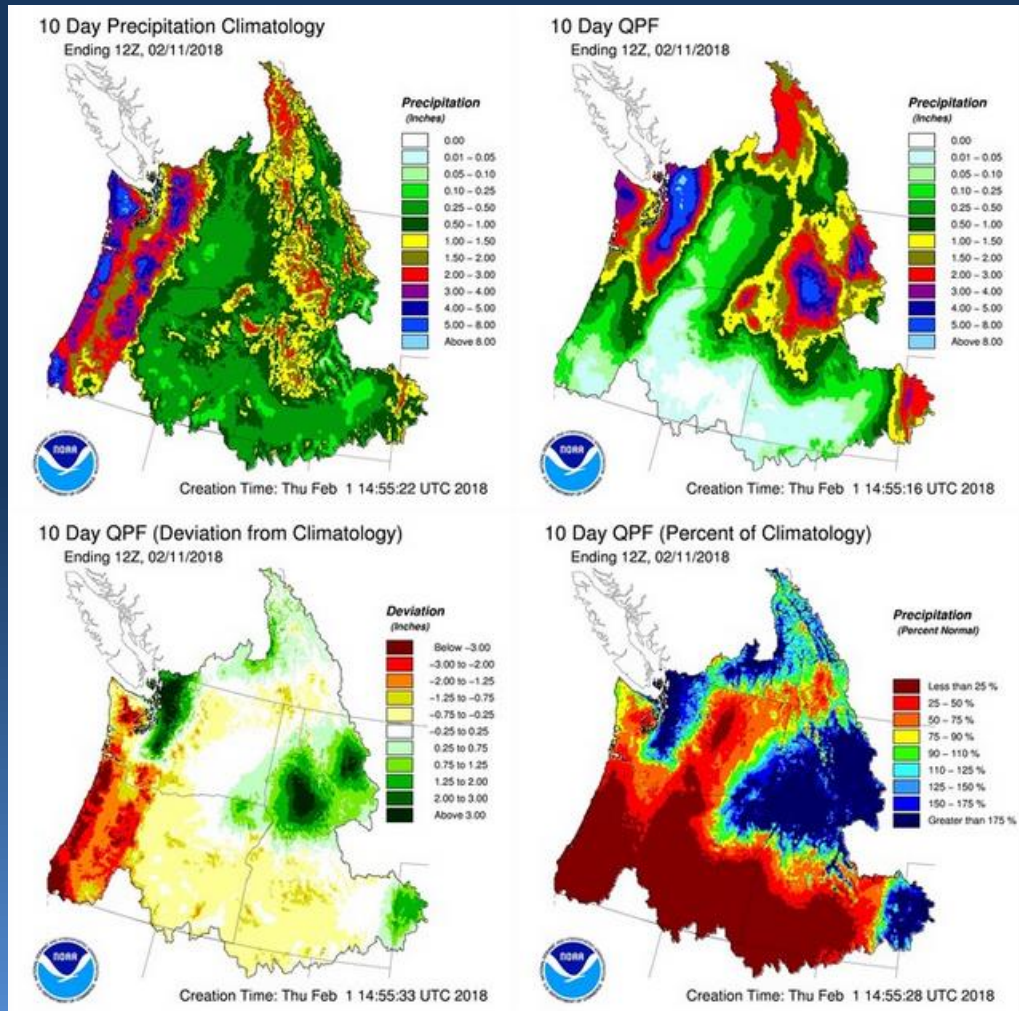




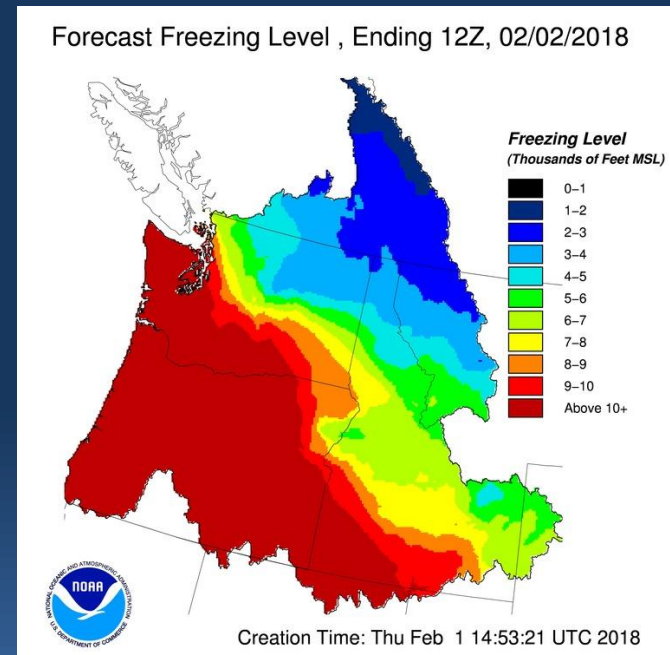
# Weather Forecasts (next 10 days)

Feb 1, 2018 – Feb 10, 2018

## 10 Precipitation Total Accumulation



## Freezing Level / Temps For Next 10s Days are WARM:



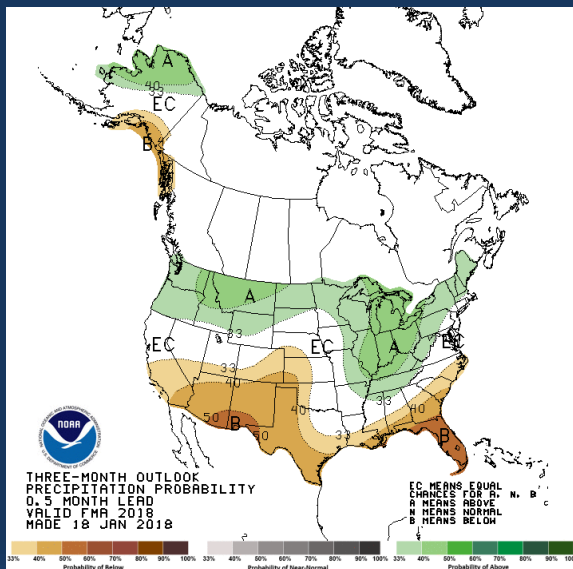
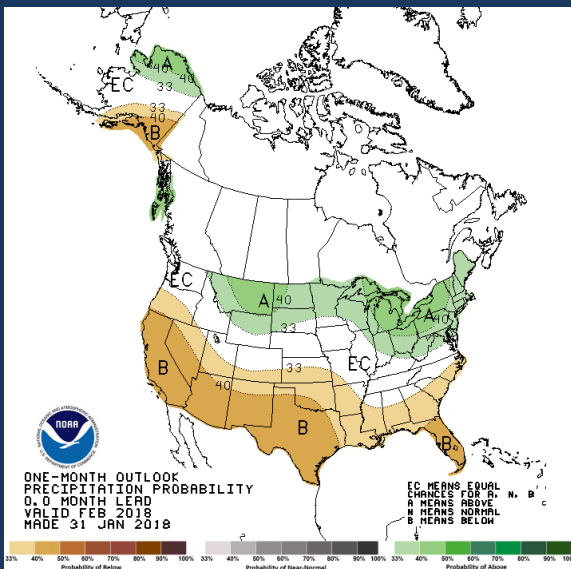


# CPC Climate Outlook

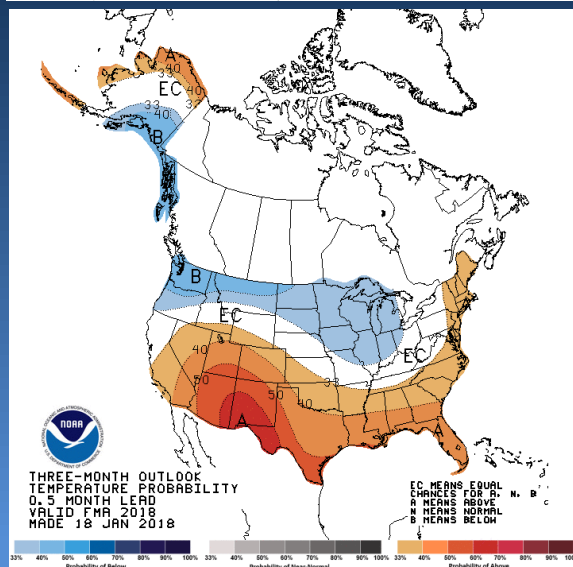
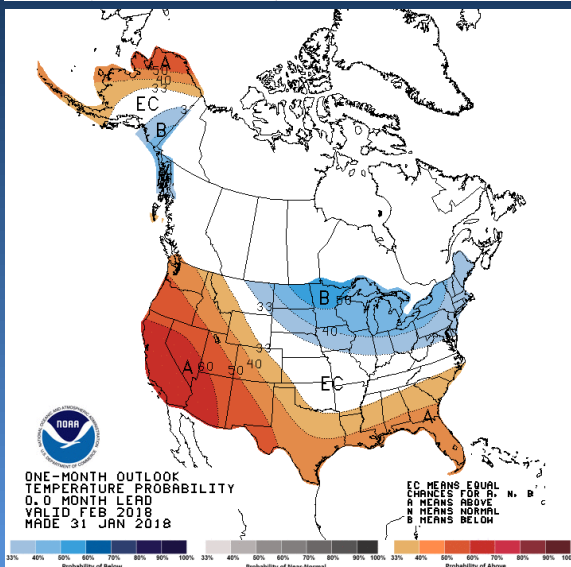
February 2018 Outlook  
Updated Jan 31

Three Month Outlook – FMA  
Updated Jan 18, next Issuance Feb 15

## Precipitation



## Temperature

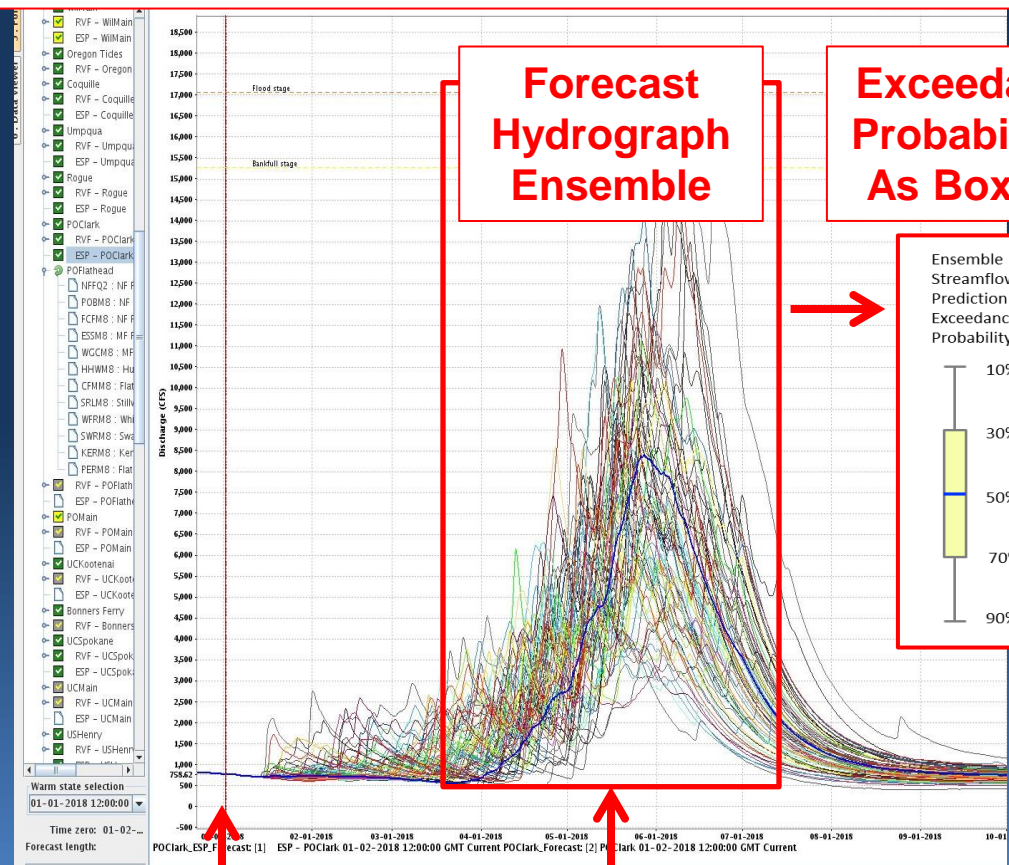




# Water Supply Methodology

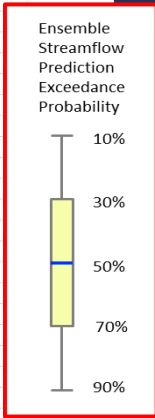
Model ensembles summarized as exceedance probabilities  
OFTEN oversimplified as a single number (median as % of 30yr normal)

**CHPS is a NWS river modeling system**  
**ESP is the ensemble technique within CHPS**

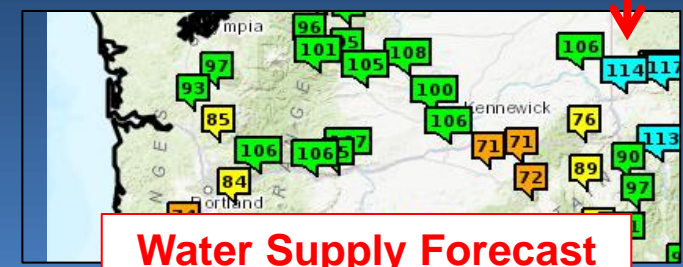
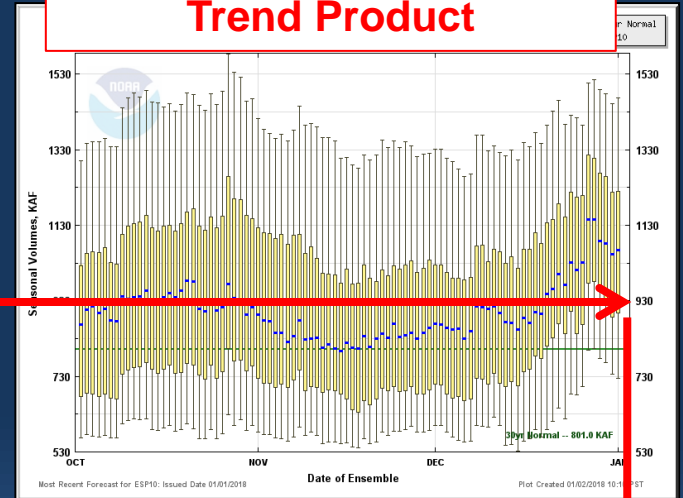


**Forecast Hydrograph Ensemble**

**Exceedance Probabilities As Boxplot**



**Water Supply Forecast Trend Product**



**Water Supply Forecast Map Summary**

**Issuance Date**

**Apr-Sep Forecast Period**

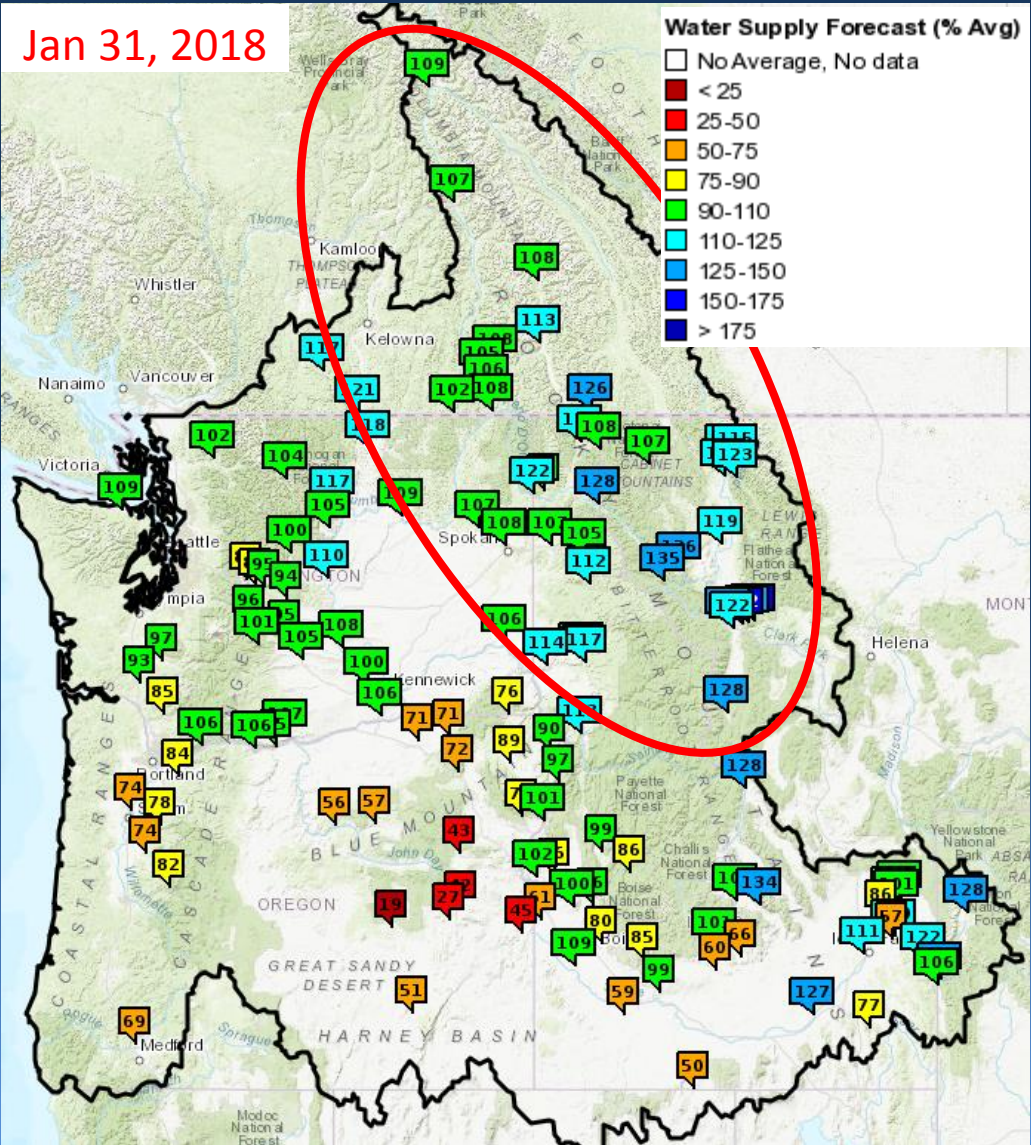


# Upper Columbia Apr-Sep Water Supply

Forecast volumes above normal  
(consistent increase from last month)



Jan 31, 2018



## Feb 2018 Apr-Sep Forecasts (% Normal)

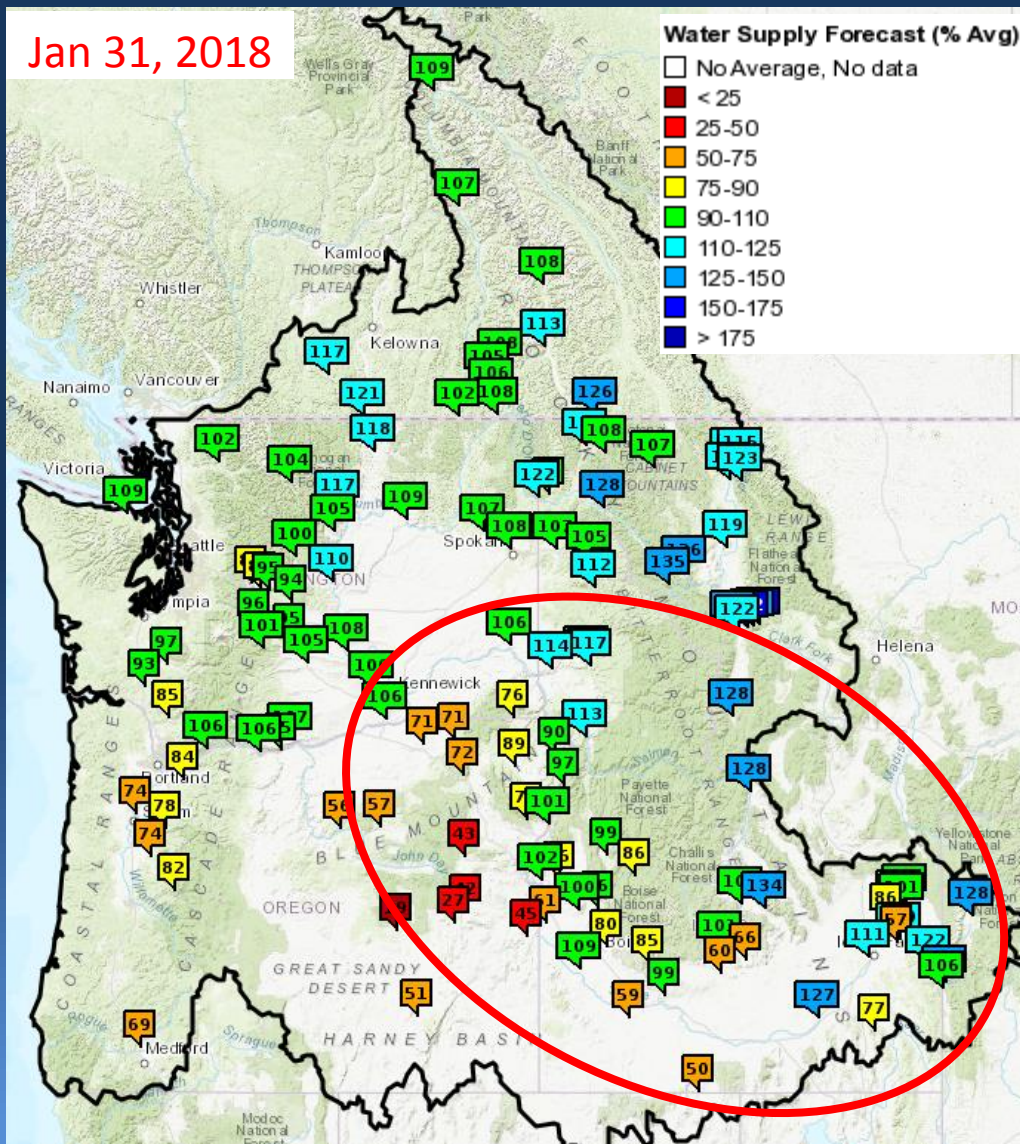
Columbia River	
- Mica Dam	+ 109%
Kootenai River	
- Libby Dam	+ 107%
Coeur d'Alene River	
- Coeur d'Alene Lake	+ 107%
SF Flathead River	
- Hungry Horse Dam	+ 123%
Pend Oreille River	
Albeni Falls Dam	+ 122%
Columbia River	
- Grand Coulee Dam	+ 109%



# Snake River Apr-Sep Water Supply

Overall, volumes near/above normal  
(variability in volume and trend since last month)

Jan 31, 2018



## Feb 2018 Apr-Sep Forecasts (% Normal)

### Upper Snake River

- Jackson Lake Dam + 128%
- Palisades Dam + 122%
- near Heise + 117%

### Boise River

- Lucky Peak Dam - 80%

### NF Clearwater River

- Dworshak Dam - 107%

### Lower Snake River

- Lower Granite Dam + 106%



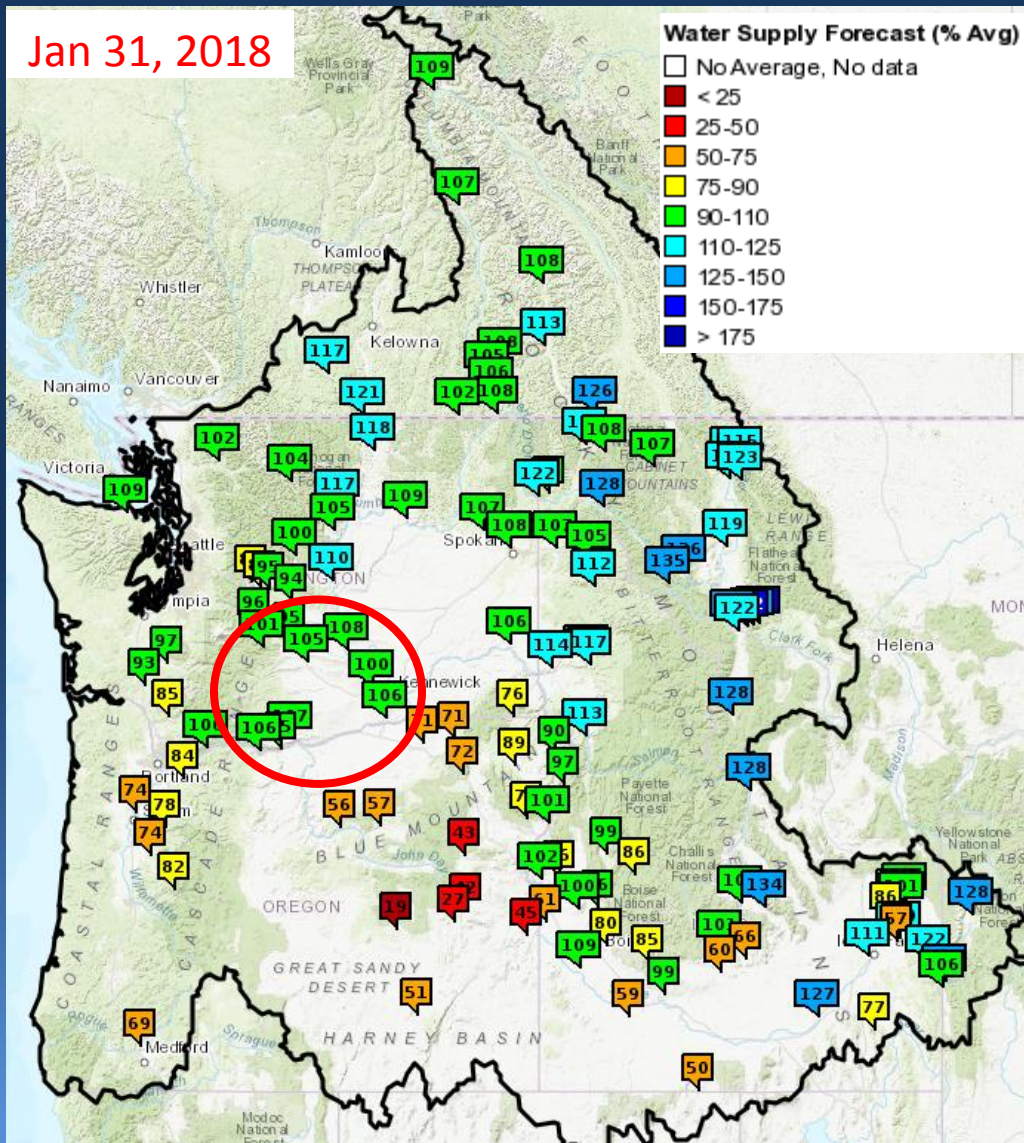


# Mainstem Columbia River Apr-Sep Water Supply

Forecast volume above normal  
(increase from last month)



Jan 31, 2018



## Feb 2018 Apr-Sep Forecasts (% Normal)

Lower Columbia

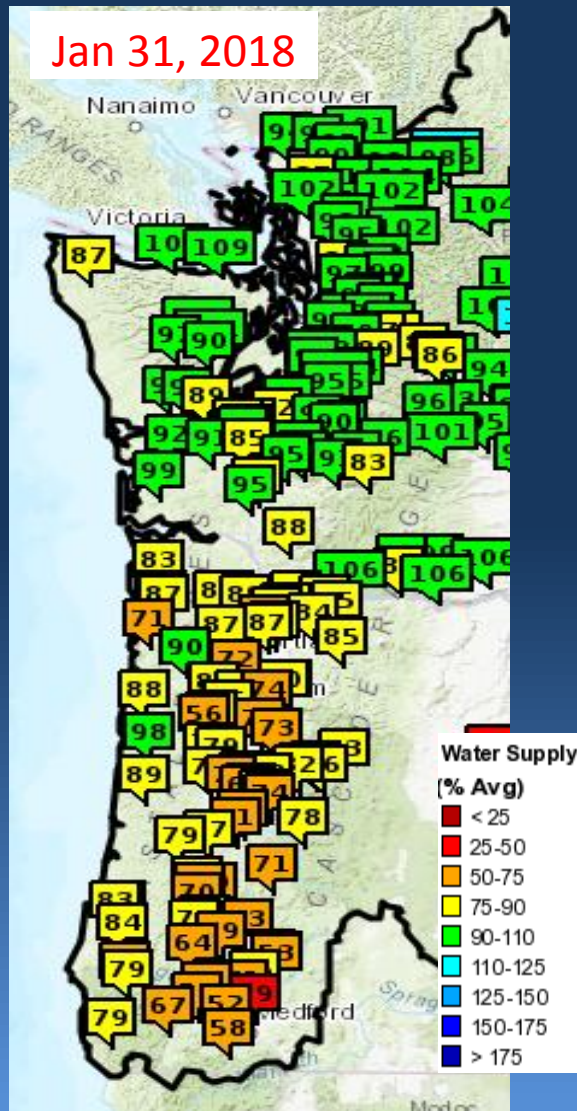
- The Dalles Dam + 107%
- (Jan 1, 2018 forecast was 96%)



# Westside Apr-Sep Water Supply

Consistent spatial trend, wetter in north and drier in south  
(for southern basins, decrease from last month)

## Feb 2018 Apr-Sep Forecasts (% Normal)



### Skagit River

- near Concrete + 103%

### Green River

- Howard Hanson Reservoir - 89%

### Cowlitz River

- Mossyrock Reservoir - 95%

- Mayfield Reservoir - 95%

### North Santiam

- At Mehama - 80%

### Willamette River

- At Salem - 72%

### Rogue River

- Applegate Reservoir - 58%



# Questions?

In order to ask questions using your phone, you will need to enter the provided **AUDIO PIN** using your phone key pad (PIN #). If you need to enter the PIN after you are connected, try (# PIN #).

You will be 'muted' until the presenter (me) unmutes you. Use the '**raise hand**' function to let us know that wish to be unmuted

Steve King, NWRFC  
W-ptr.Webmaster@noaa.gov  
(503)326-7291





# NWRFC 2018 Water Supply Briefing Schedule



2018 Schedule for <i>Live</i> Water Supply Briefings					
Jan	Feb	Mar	Apr	May	June
4	1	1	5	3	TBD
<i>All presentations held at 10:00am PDT/PST, unless noted otherwise</i>					
<a href="https://register.gotowebinar.com/rt/7651951505041247747">Click here for Registration Information</a>					

<https://register.gotowebinar.com/rt/7651951505041247747>



# Alternate Audio Conference Call



We are having technical difficulties with the audio conferencing. Please hang up and re-connect on your phone using the following information.

## Verizon Conferencing

Conference ID:	6349348
Participant Passcode:	90227
Phone Number:	1-888-749-6909



[www.nwrfc.noaa.gov](http://www.nwrfc.noaa.gov)



# Questions?



[stephen.king@noaa.gov](mailto:stephen.king@noaa.gov)  
[kevin.berghoff@noaa.gov](mailto:kevin.berghoff@noaa.gov)  
[W-ptr.Webmaster@noaa.gov](mailto:W-ptr.Webmaster@noaa.gov)  
(503)326-7291